

TWO-TONE ISOLATOR ASSEMBLY

ABSTRACT

The invention proposes to address the vibration transfer function transmitted by a turbo-fan engine or equivalent to the aircraft structure, with two types of isolators mounted on a unique assembly but with a different physical response to the transfer function, an absorbing one and a resonating one. The difference in nature of such responses induces a non-interaction effect between the two isolators.

The invention concerns more specifically a two-tone isolator assembly adapted to be mounted on an aircraft or equivalent comprising in particular a head, a cabin yoke and a power engine structure having a longitudinal axis crossed by a radial plan. The two-tone isolator assembly comprises, located at the head side of the aircraft, at least one support for, at least, one fluid mount isolator and two dynamic absorbers, and mechanical means to couple said support to the power engine structure and to the cabin yoke. Said assembly is designed to link the fluid mount isolator at once to the power engine structure and to the cabin yoke, whereas the dynamic absorber is only linked to the cabin structure. Furthermore, the dynamic absorbers are supported to move in the radial plan of the power engine structure.

FIG. 2